Symmetry of 2D shapes

Learn

Some objects have two identical halves. When one half is like a mirror image of the other half, we can say the object or shape is symmetrical.

Look at the butterfly. It has a line of symmetry. This is a bit like a mirror. One side is an identical reflection of the other.

Some objects and shapes have their lines of symmetry in different positions and some can have more than one.

Lines of symmetry can be harder to spot. Can you see them for these two?

This diagram has two lines of symmetry. This square has four lines of symmetry.

Tips

- Remember that for patterns, colours must be symmetrical too.
- Regular shapes have the same number of lines of symmetry as they do sides.
- A circle has an infinite number of lines of symmetry.
- The letters Z and S might look symmetrical, but their halves are not mirror images.

Talk maths

With a partner, discuss these shapes and identify all the lines of symmetry. Many of them only have one line, but some have more than one.

Activities

1. Carefully copy and complete these shapes to make them symmetrical.

2. Draw each number. Then show the lines of symmetry for those that have one or more.

3. Copy these regular shapes and then draw all the lines of symmetry on each one.

Problems

Brain-teaser
Copy this shape and then draw its other half to make it symmetrical.

Brain-buster
Tanya says she can think of four capital letters that each have two or more lines of symmetry. Can you show each letter with its lines of symmetry?